1. An electrostatic discharge protection device comprising:

a p-well region in a semiconductor substrate;

an n+ region in said p-well region wherein said n+ region is connected to a first voltage supply;

an n-well region in said p-well region wherein said n+ region is spaced from said n-well region a distance such that a depletion region extends therebetween during normal operation; and

a p+ region in said n-well region wherein said p+ region is connected to a second voltage supply of greater value than said first voltage supply during said normal operation wherein current is conducted through said n+ region to said p+ region during an electrostatic discharge event.

2. The device according to Claim 1 wherein said p-well region comprises a dopant concentration of between about $1x10^{15}$ atoms/cm^3 and $1x10^{16}$ atoms/cm^3.

3. The device according to Claim 1 wherein said n-well region comprises a dopant concentration of between about $5x10^{15}$ atoms/cm^3 and $5x10^{16}$ atoms/cm^3 and a junction depth of between about 0.3 microns and 1.0 microns.

4. The device according to Claim 1 wherein said n+ region comprises a dopant concentration of between about $1x10^{20}$

atoms/cm^3 and $1x10^{22}$ atoms/cm^3 and a junction depth of between about 0.1 microns and 0.3 microns.

5. The device according to Claim 1 wherein said distance between said n+ region and said n-well region is between about 0.2 microns and 1.0 microns.

6. The device according to Claim 1 wherein said first voltage supply is between about 1.0 Volts and 5.0 Volts referenced to said p-well region during said normal operation.

7. The device according to Claim 1 wherein said second voltage supply is between about 1.0 Volts and 5.0 Volts referenced to said p-well region during said normal operation.

Subt A2

8. An electrostatic discharge protection device comprising:

a p-well region in a semiconductor substrate;

an n+ region in said p-well region wherein said n+ region is connected to a first voltage supply;

an n-well region in said p-well region wherein said n+ region is spaced from said n-well region a distance such that a depletion region extends therebetween during normal operation and wherein said distance between said n+ region and said n-well region is between about 0.2 microns and 1.0 microns; and

a p+ region in said n-well region wherein said p+ region is connected to a second voltage supply of greater value than said first voltage supply during said normal operation wherein current is conducted through said n+ region to said p+ region during an electrostatic discharge event.

9. The device according to Claim 8 wherein said p-well region comprises a dopant concentration of between about $1x10^{15}$ atoms/cm^3 and $1x10^{16}$ atoms/cm^3.

10. The device according to Claim 8 wherein said n-well region comprises a dopant concentration of between about $5x10^{15}$ atoms/cm^3 and $5x10^{16}$ atoms/cm^3 and a junction depth of between about 0.3 microns and 1.0 microns.

11. The device according to Claim 8 wherein said n+ region comprises a dopant concentration of between about $1x10^{20}$ atoms/cm^3 and $1x10^{22}$ atoms/cm^3 and a junction depth of between about 0.1 microns and 0.3 microns.

12. The device according to Claim 8 wherein said first voltage supply is between about 1.0 Volts and 5.0 Volts referenced to said p-well region during said normal operation.

13. The device according to Claim 8 wherein said second voltage supply is between about 1.0 Volts and 5.0 Volts referenced to said p-well region during said normal operation.

Subt A3

14. An electrostatic discharge protection circuit on an integrated circuit device comprising:

a ground pad connected to an external ground reference and to a p+ region in a p-well in a substrate;

a first voltage supply pad connected to an external first voltage supply and to an n+ region in said p-well; and

a second voltage supply pad connected to an external second voltage supply of greater value than said external first voltage supply during normal operation and to a p+ region in an n-well region in said p-well region wherein said n+ region is spaced from said n-well region a distance such that a depletion region extends therebetween during said normal operation and wherein current is conducted through said external second voltage supply pad to said external first voltage supply pad during an electrostatic discharge event.

15. The device according to Claim 14 wherein said p-well region comprises a dopant concentration of between about $1x10^{15}$ atoms/cm^3 and $1x10^{16}$ atoms/cm^3.

16. The device according to Claim 14 wherein said n-well region comprises a dopant concentration of between about $5x10^{15}$ atoms/cm^3 and $5x10^{16}$ atoms/cm^3 and a junction depth of between about 0.3 microns and 1.0 microns.

17. The device according to Claim 14 wherein said n+ region comprises a dopant concentration of between about $1x10^{20}$ atoms/cm^3 and $1x10^{22}$ atoms/cm^3 and a junction depth of between about 0.1 microns and 0.3 microns.

18. The device according to Claim 14 wherein said distance between said n+ region and said n-well region is between about 0.3 microns and 1.0 microns.

19. The device according to Claim 14 wherein said external first voltage supply is between about 1.0 Volts and 5.0 Volts referenced to said p-well region during said normal operation.

20. The device according to Claim 14 wherein said external second voltage supply is between about 1.0 Volts and 5.0 Volts referenced to said p-well region during said normal operation.